

FIG. 10

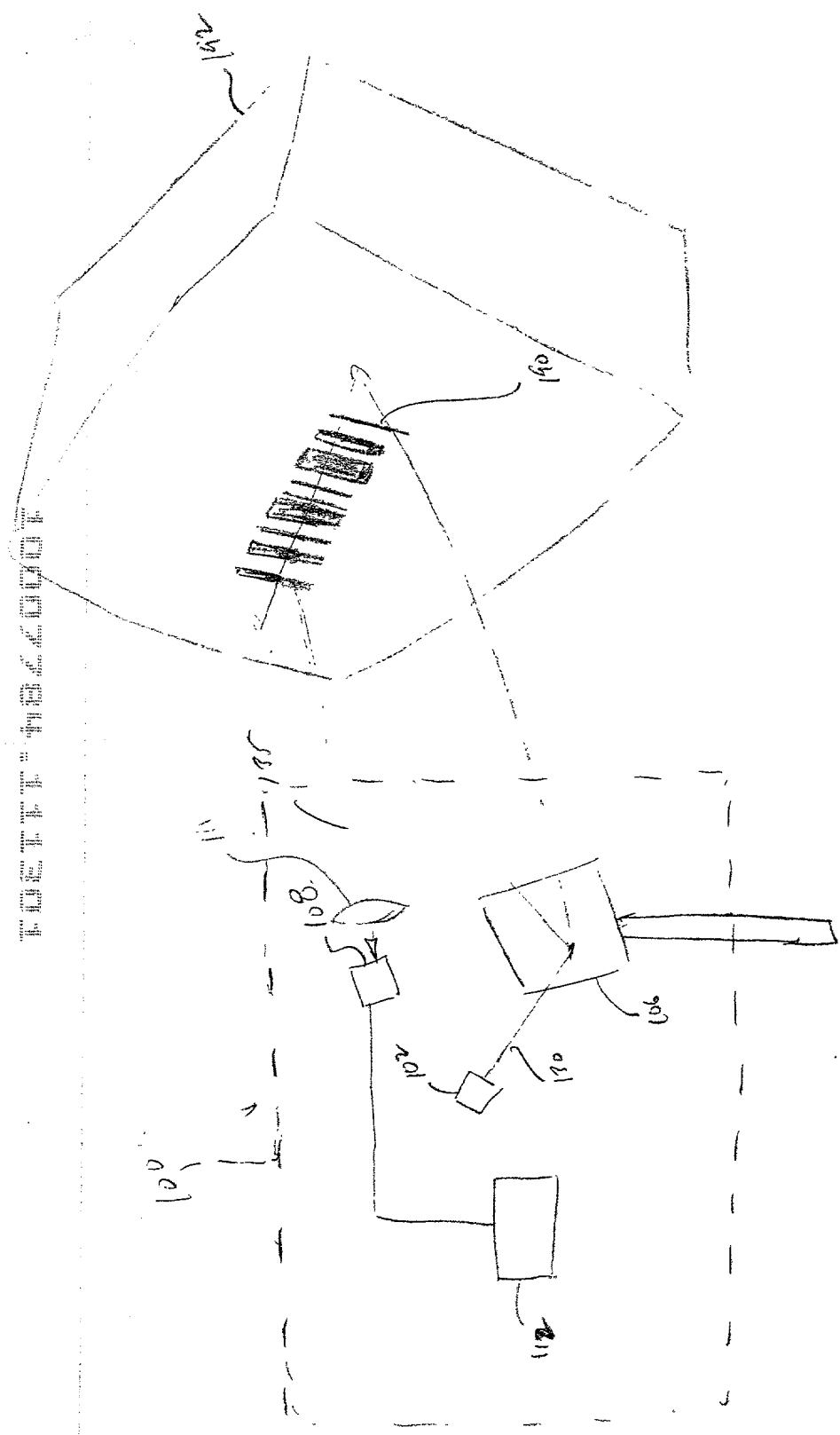
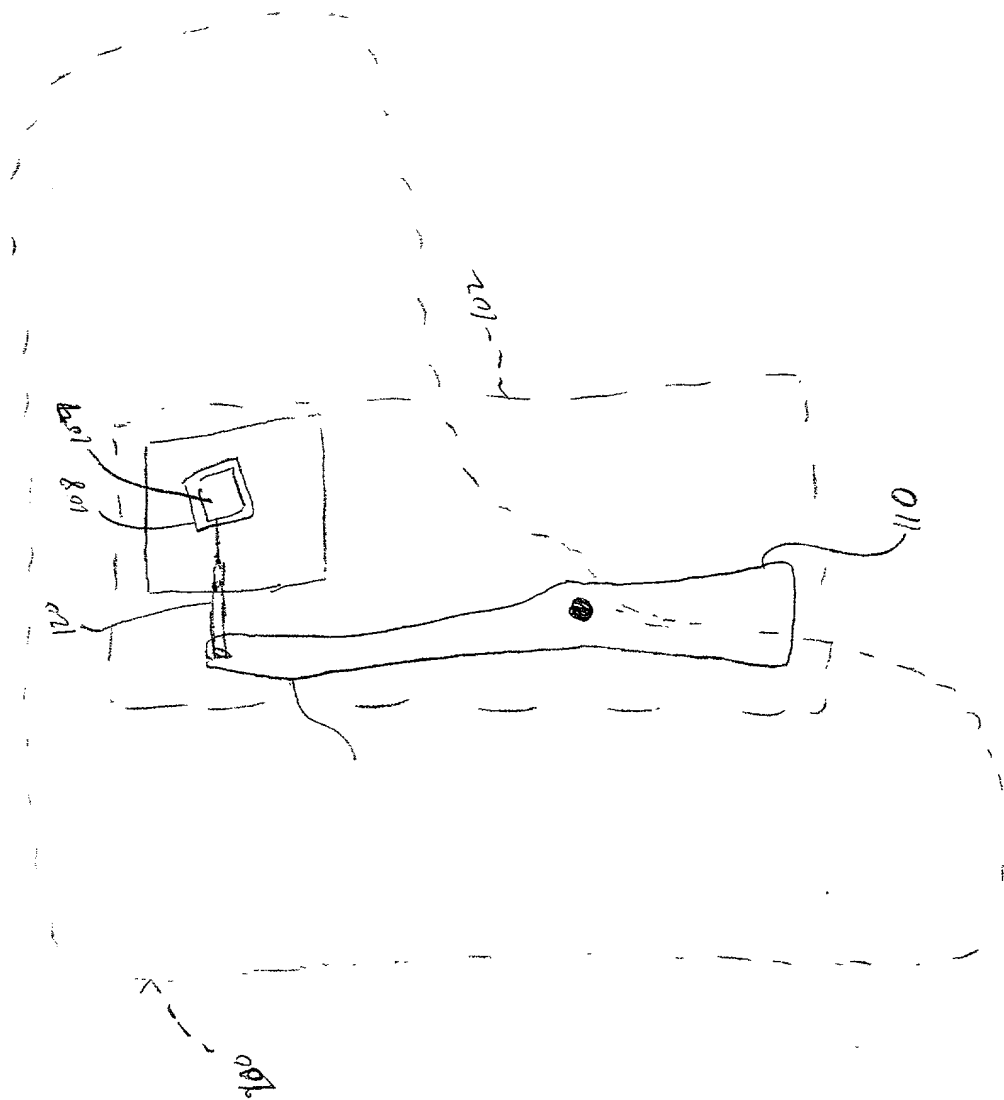


FIG. 10

FIG. 1



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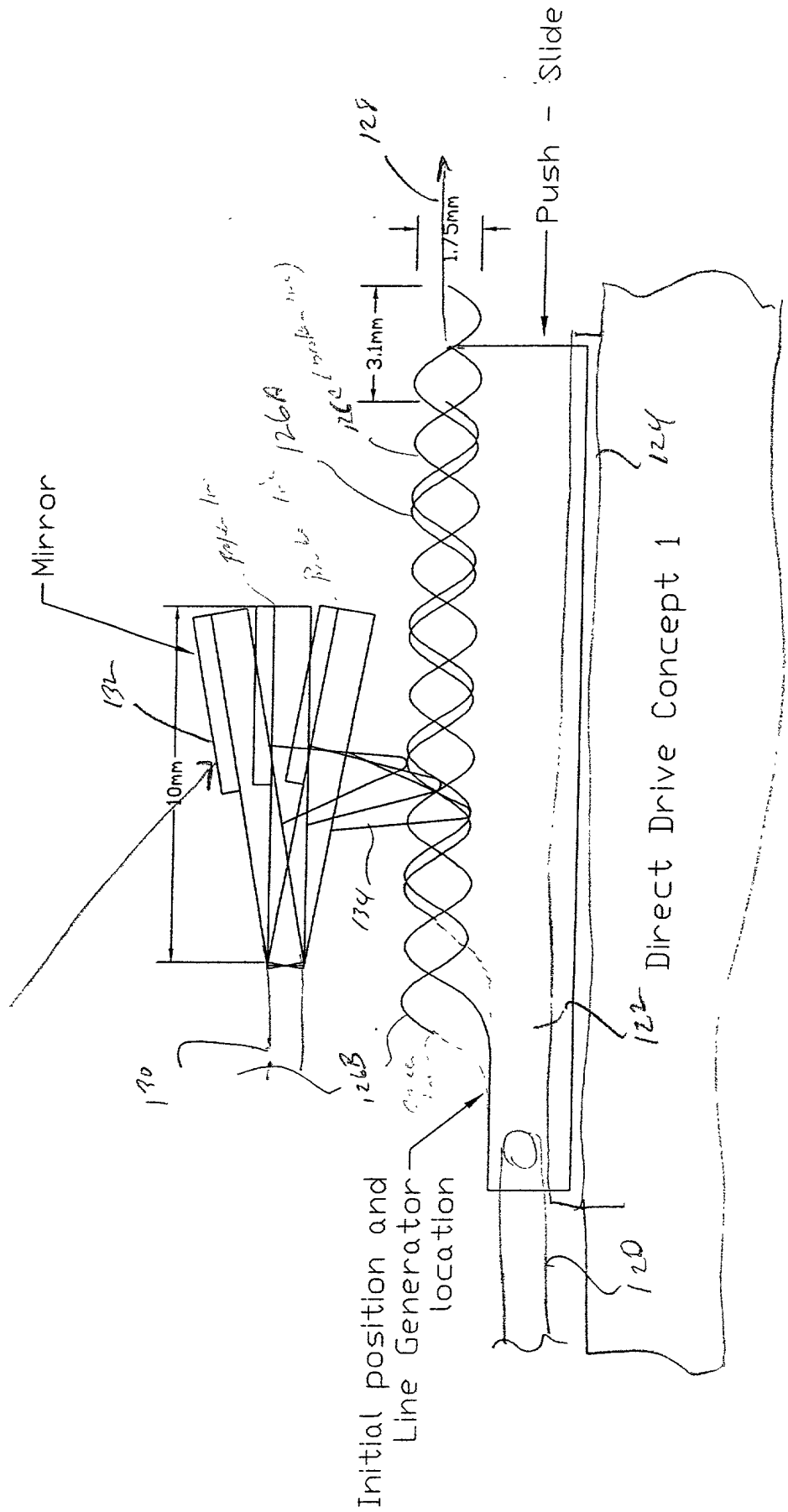
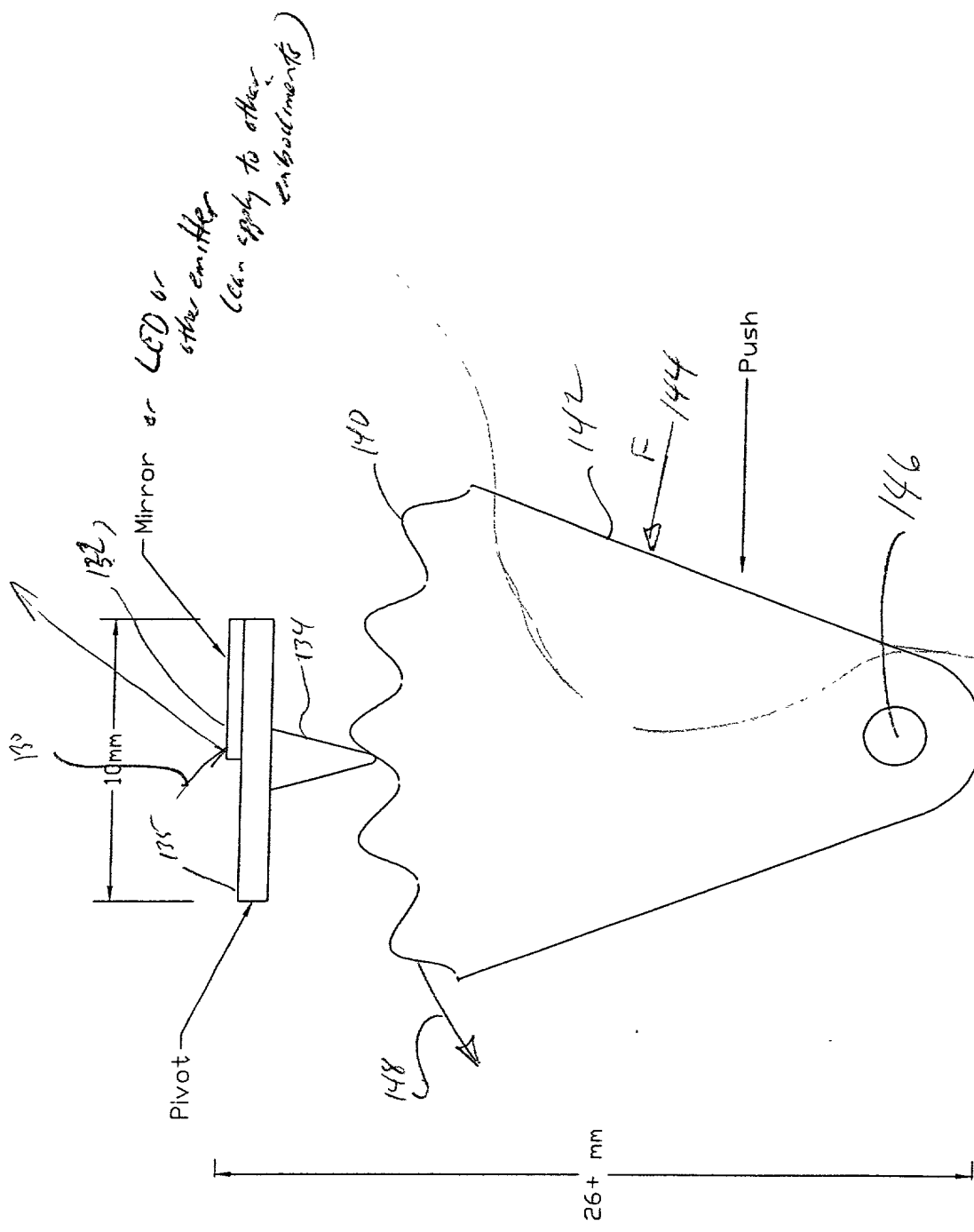
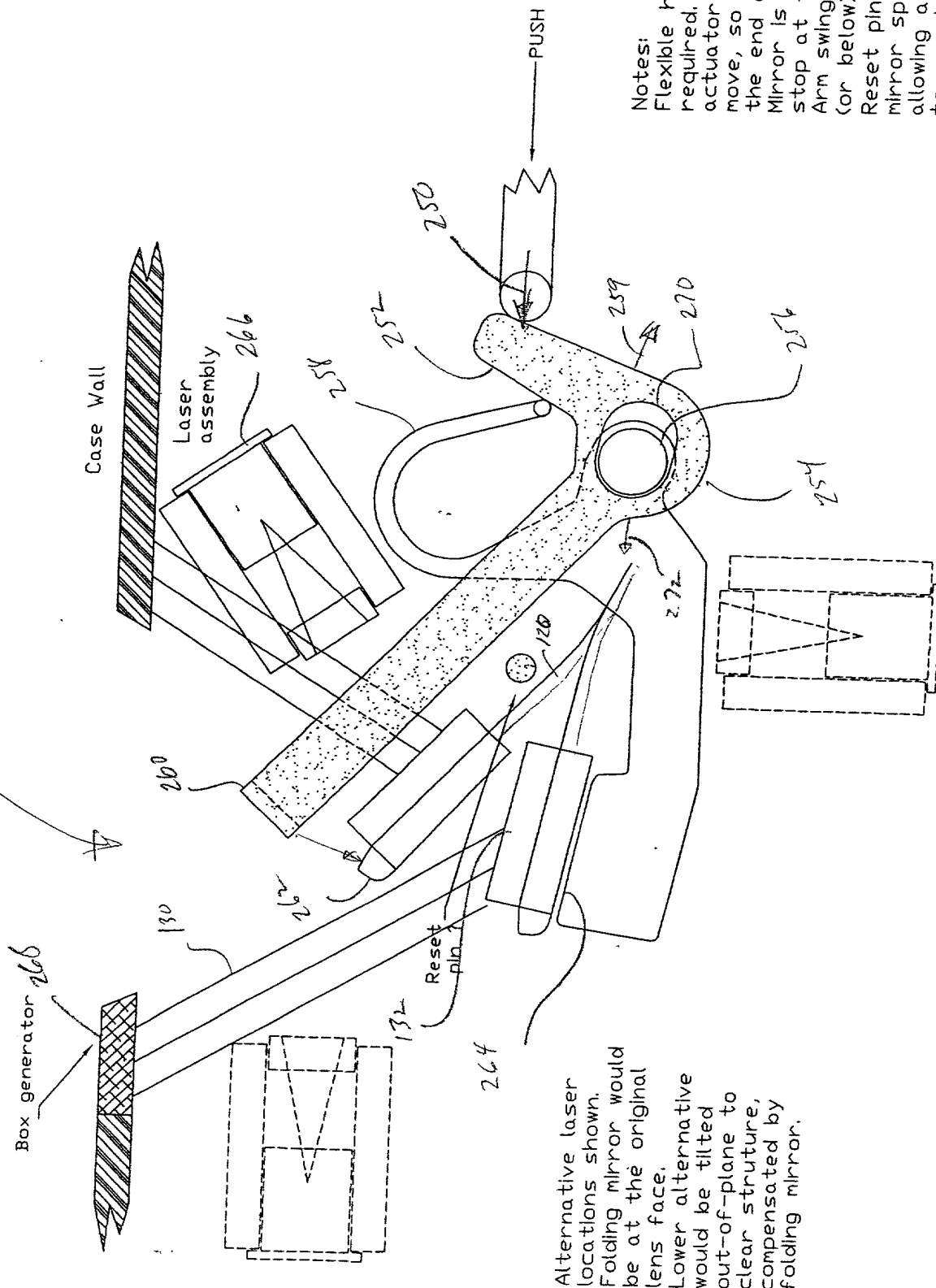


FIG. 4



Direct Drive Concept 2

274 f/280000

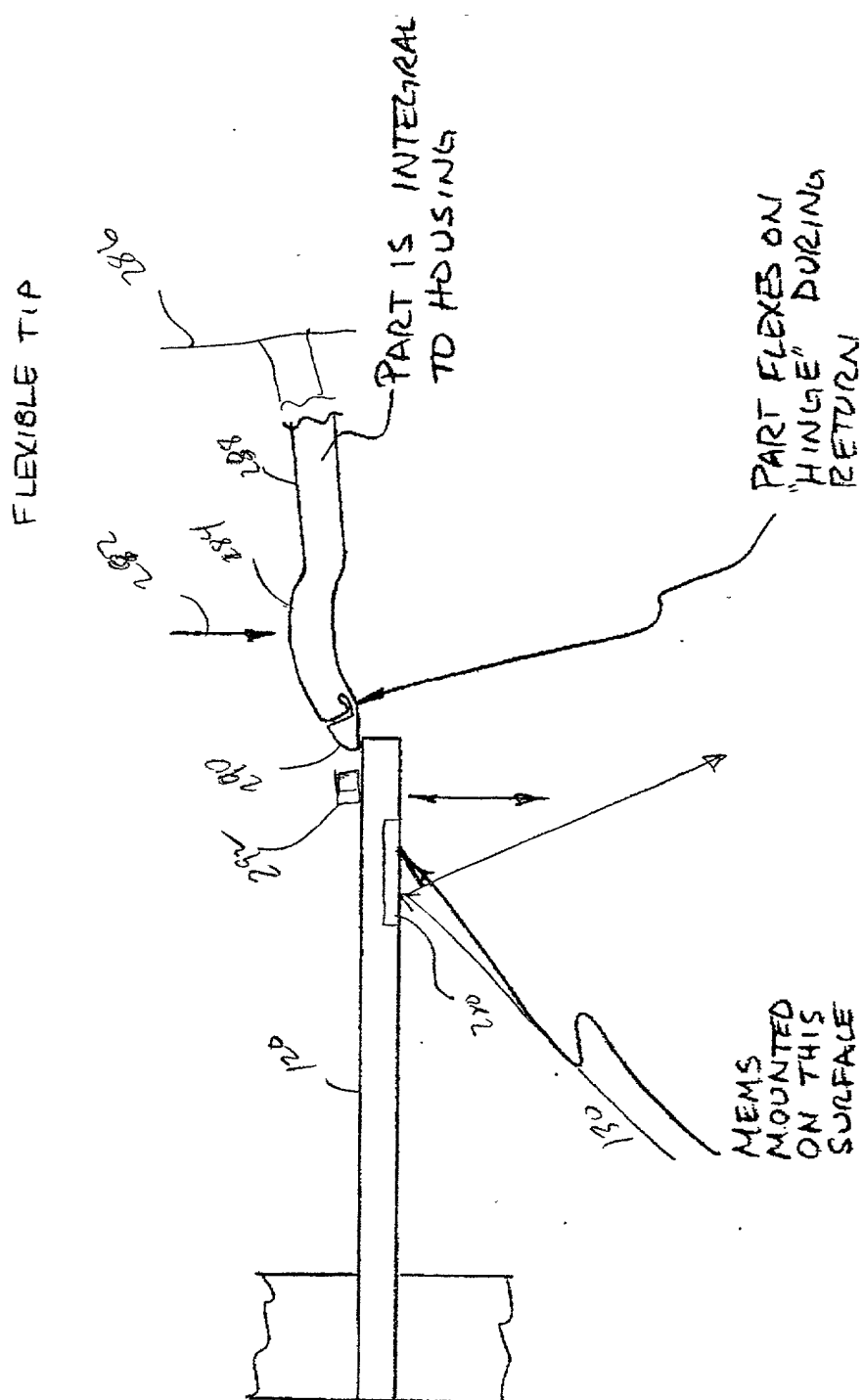


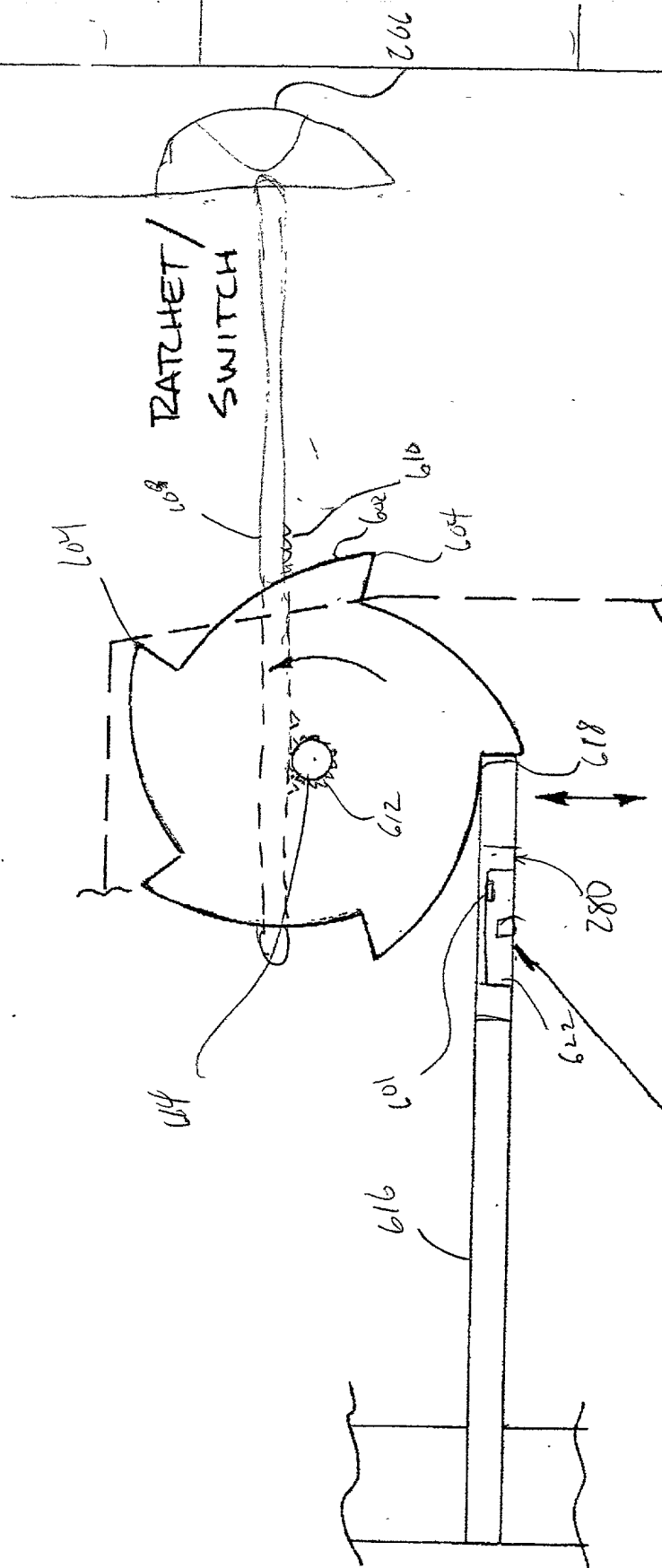
Notes:
Flexible hook not required. Can cause actuator arm axis to move, so hook clears the end of mirror. Mirror is against stop at that point. Arm swings above (or below) mirror. Reset pin causes mirror spring to bend, allowing actuator arm to reset.

Alternative laser locations shown.
Folding mirror would be at the original lens face.
Lower alternative would be tilted out-of-plane to clear structure, compensated by folding mirror.

Concept for Another Simplified Oscillating Whiskey

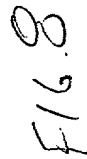
5/6/6



[illegible]

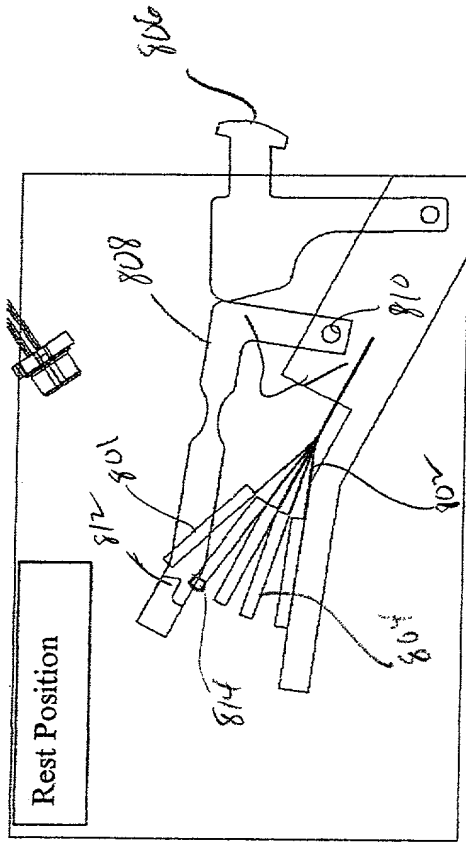
MEMS
MOUNTED
ON THIS
SURFACE

16.7

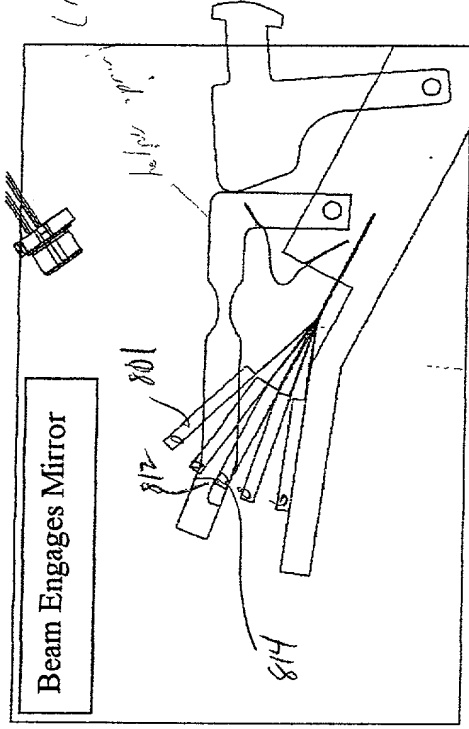
[illegible]

Simplified Whiskey With Independent Beam

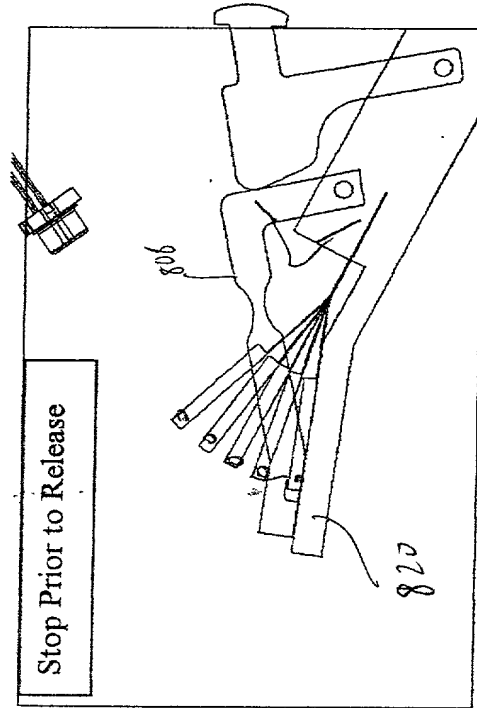
FIG. 1



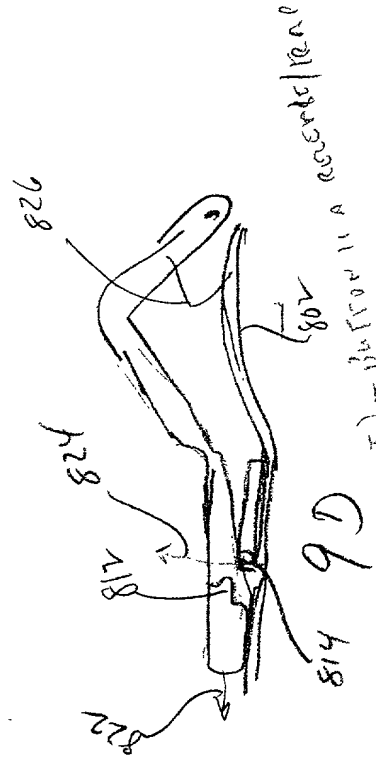
9A



9B



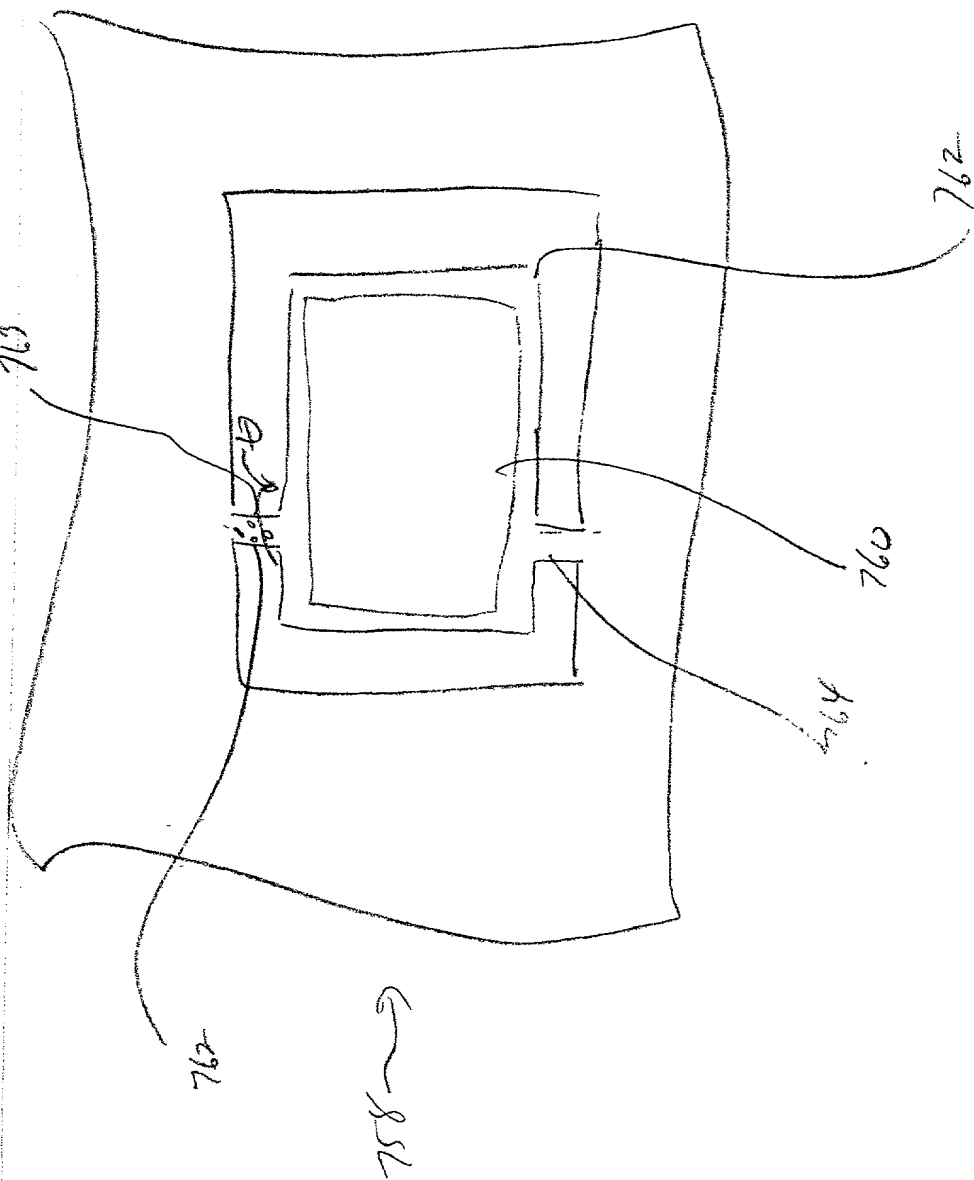
9C



9D

WITH NO MECHANICAL STOP - BUT FOR A RECESS

POSITION ON FINGER



F 16.90

650-552-9396

COFFEE

5/11/12

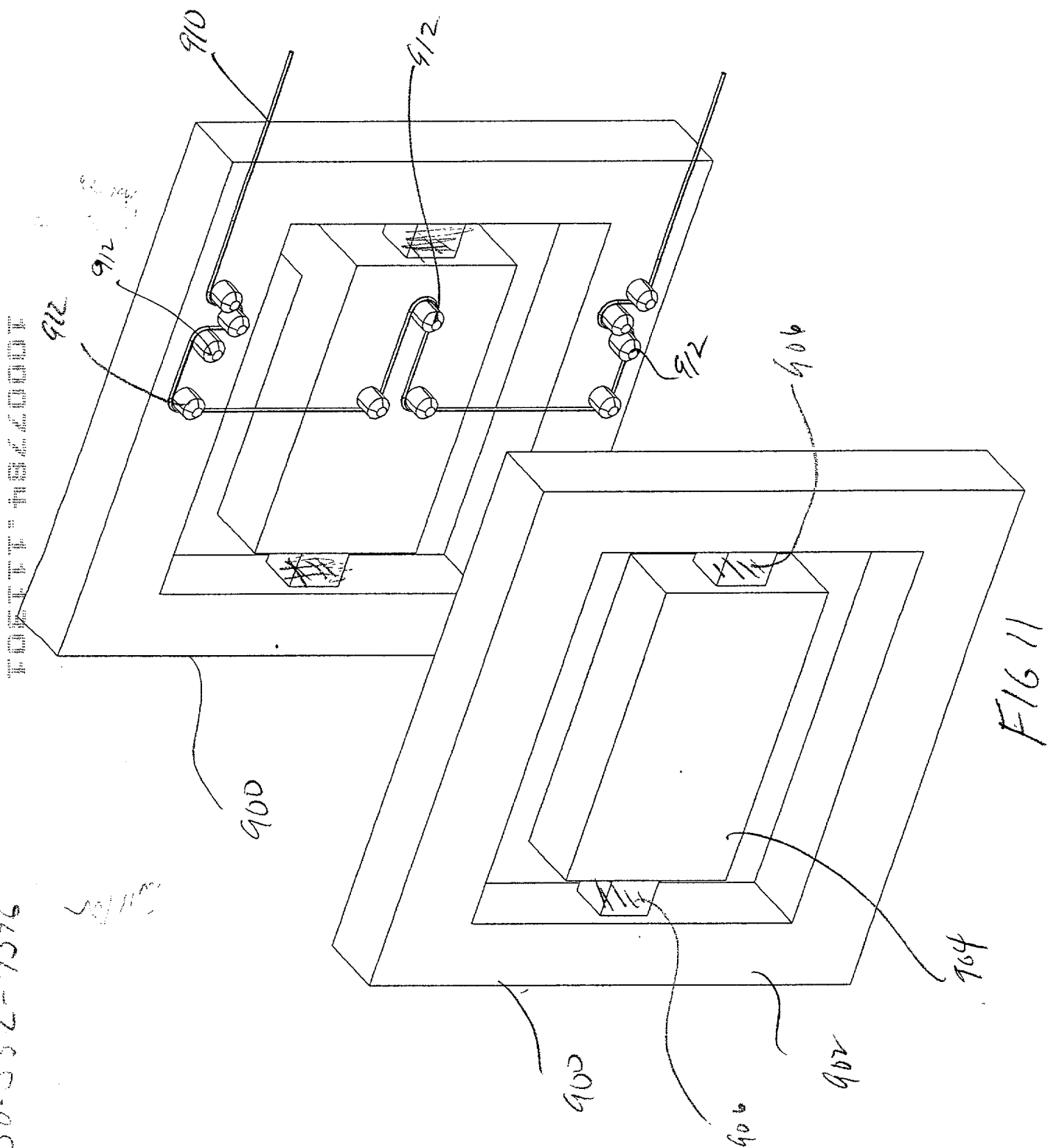


FIG 11

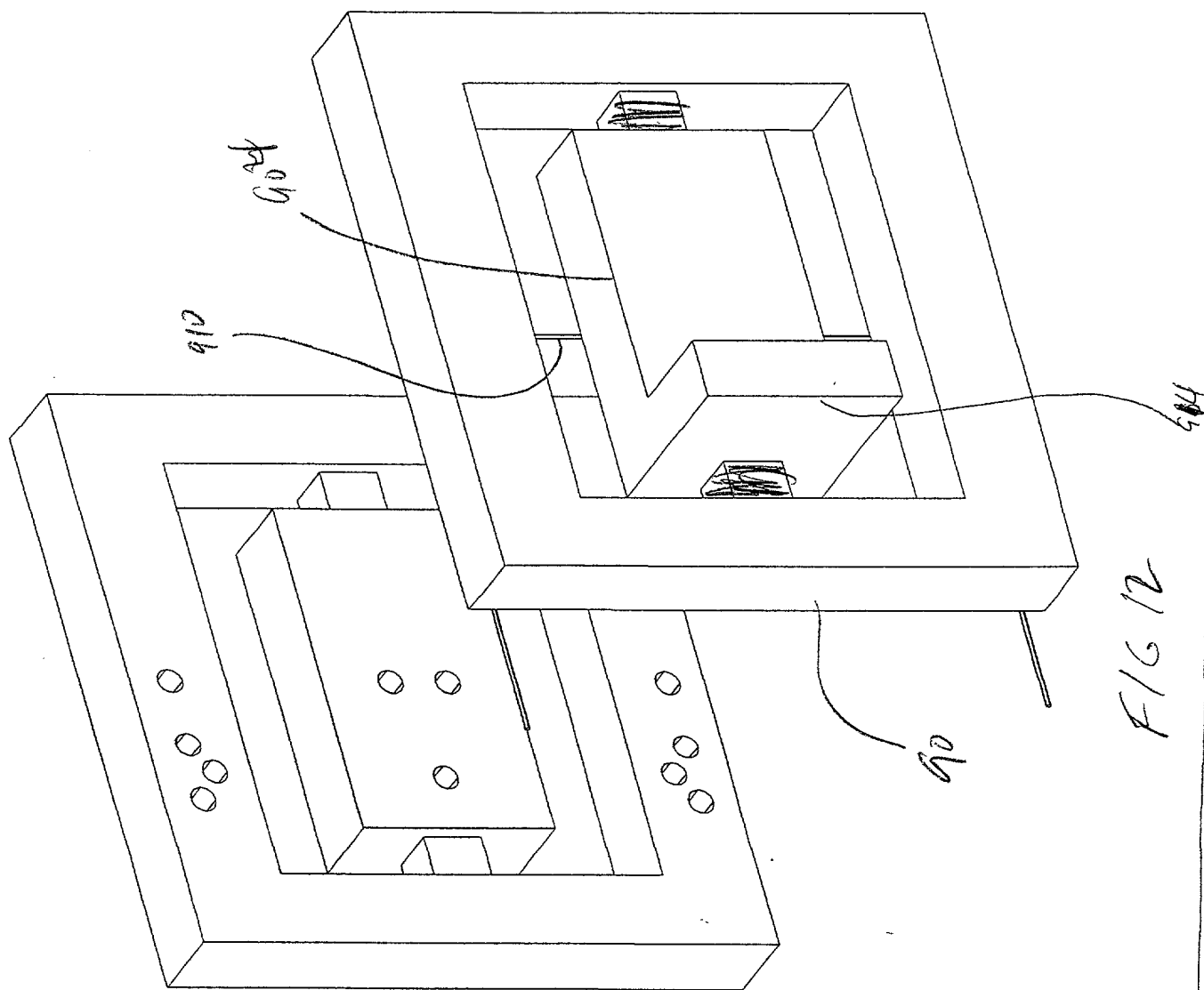
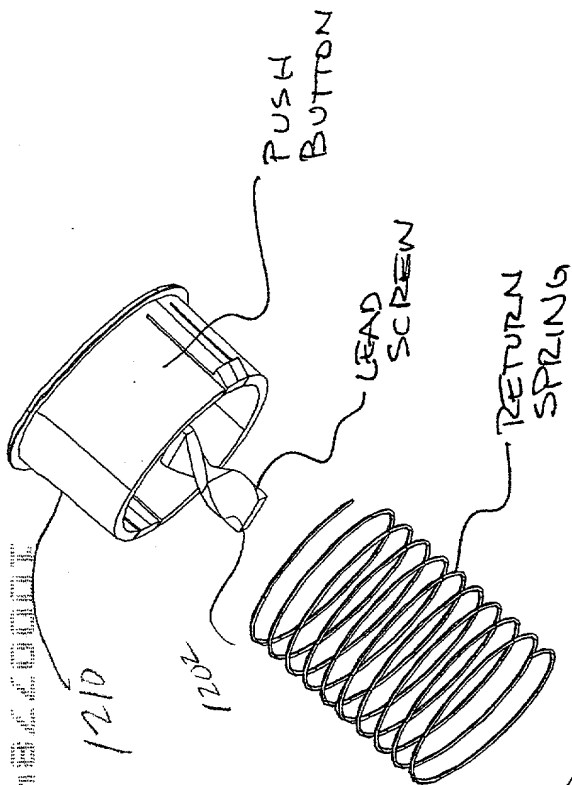


FIG 12

FIG. 13

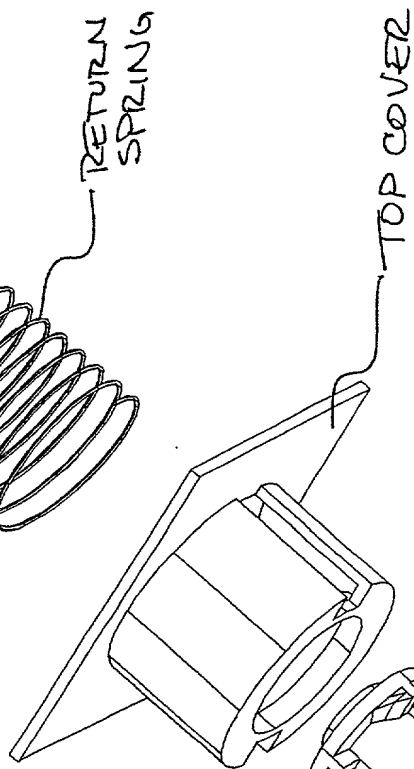
120



1212

1204

1208



DRIVE DISK

MIRROR POLYGON

BEARING

BOTTOM COVER

LEAD SCREW

FIG 13

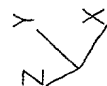


FIG. 14

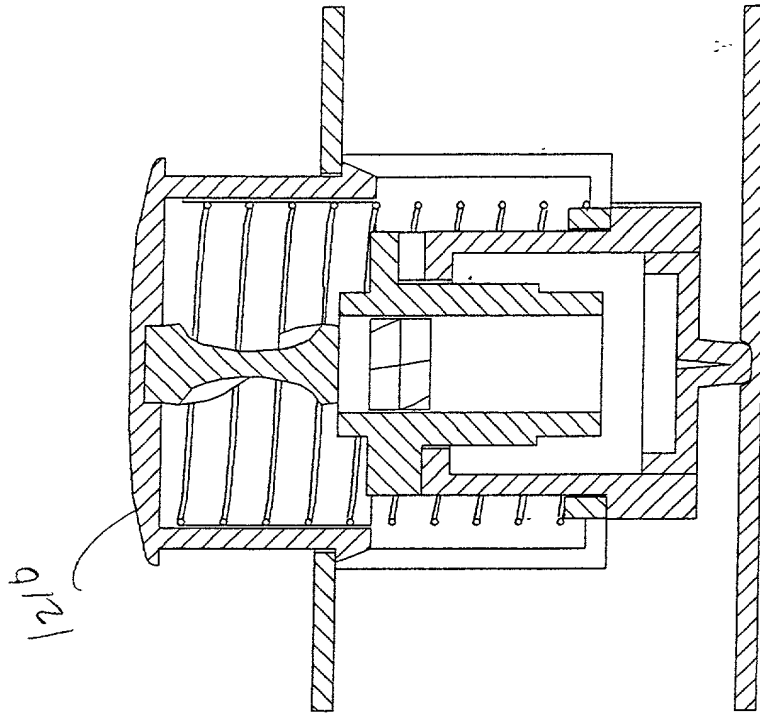
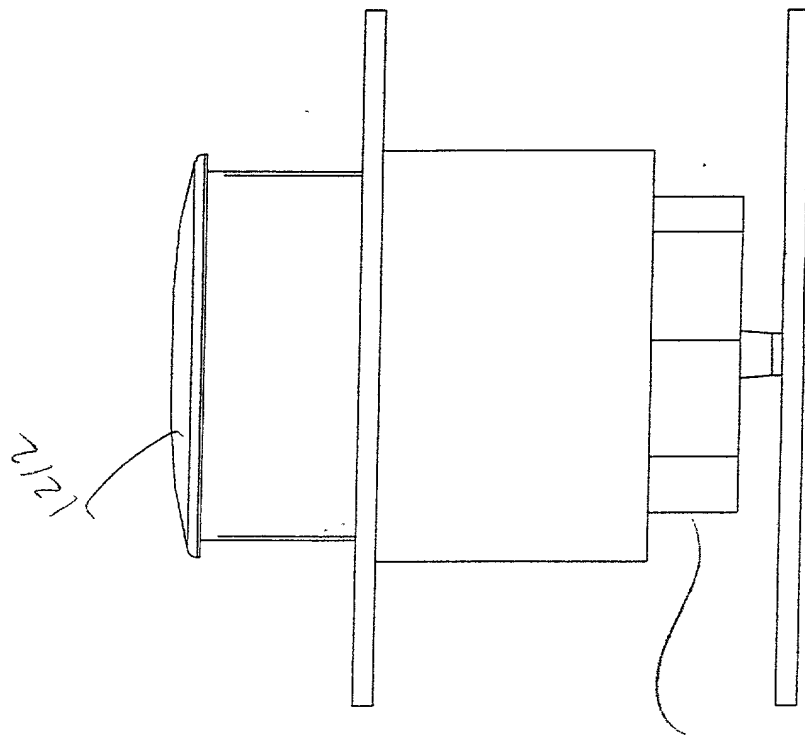


FIG. 14

LEAD SCREW

1502

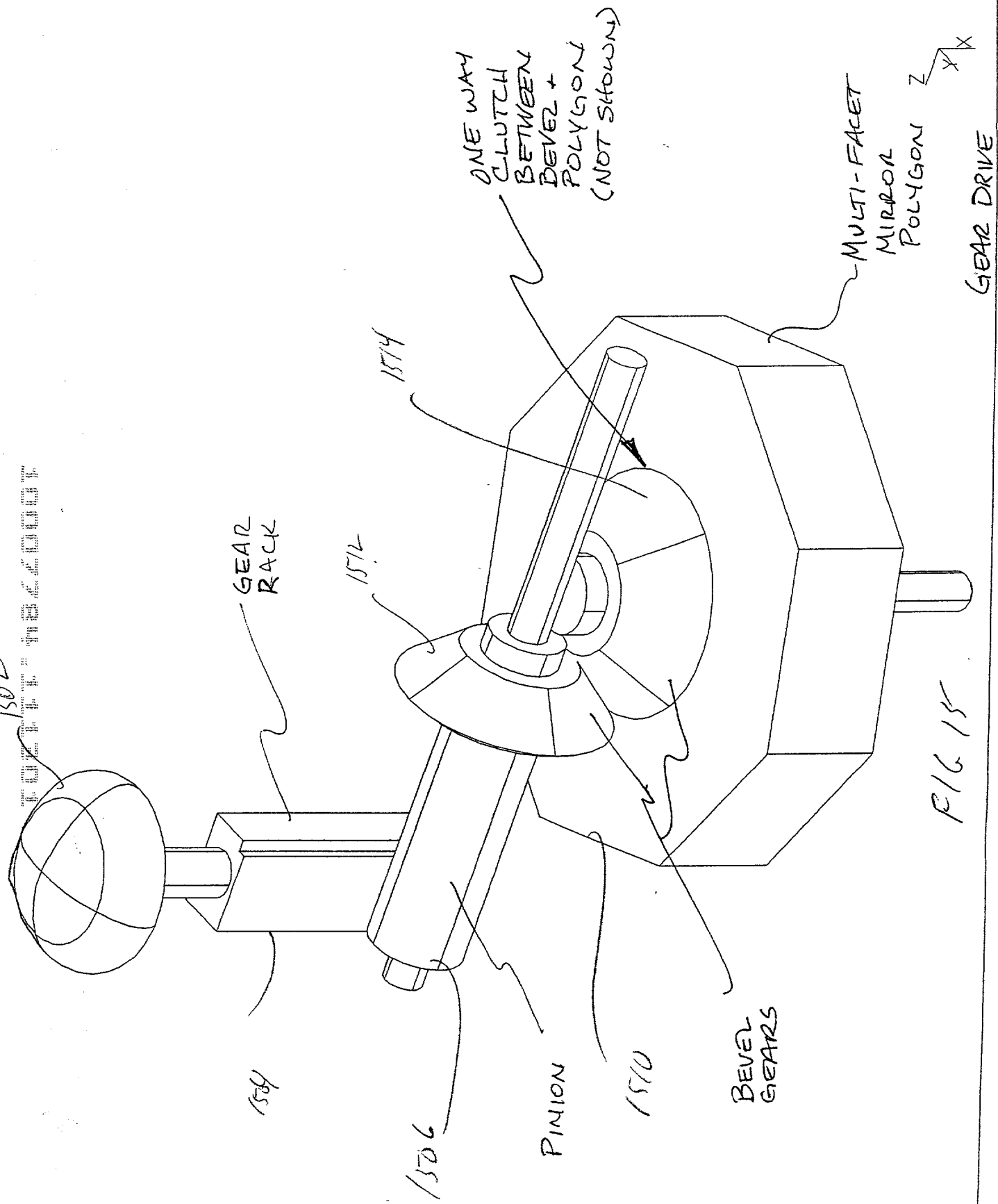


FIG 15

A CONSTANT FORCE IS APPLIED TO THE ESCAPE WHEEL. THE ESCAPE WHEEL PROVIDES AN IMPULSE TO THE BALANCE THROUGH THE LEVER, CAUSING THE BALANCE/HAIRSPRING TO OSCILLATE. EACH OSCILLATION OF THE BALANCE CAUSES THE LEVER TO ROTATE, WHICH IN TURN ALLOWS A SINGLE TOOTH OF THE ESCAPE WHEEL TO RELEASE.

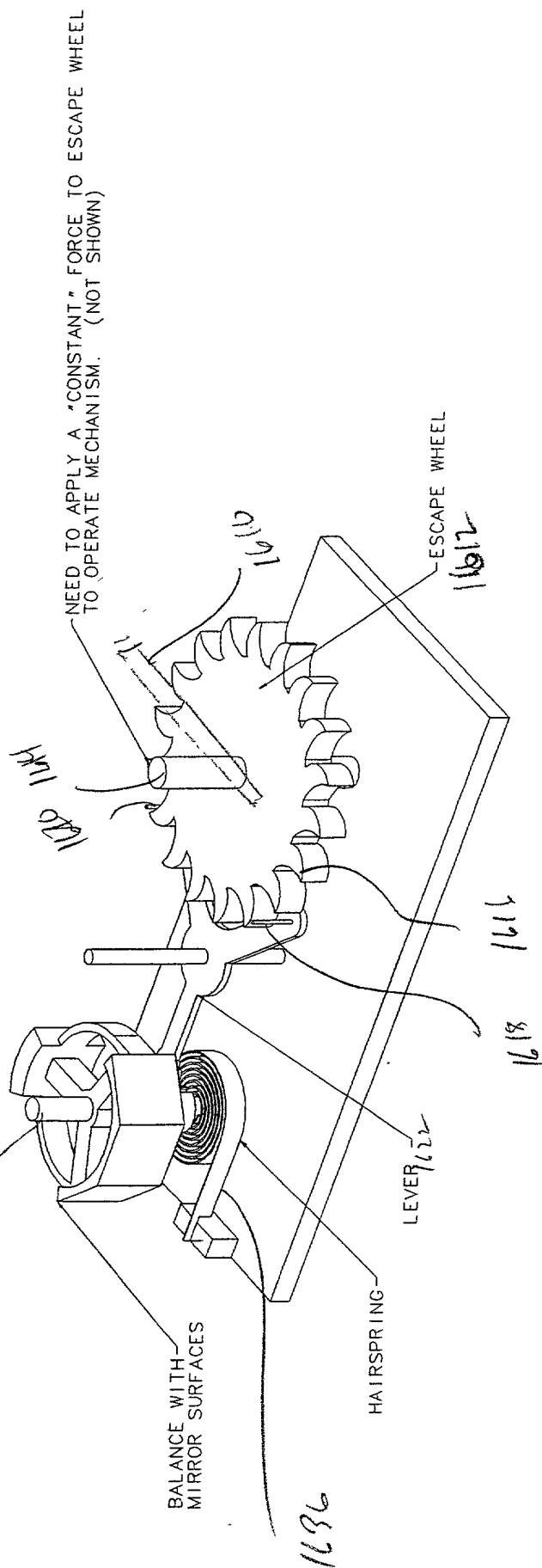
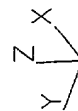
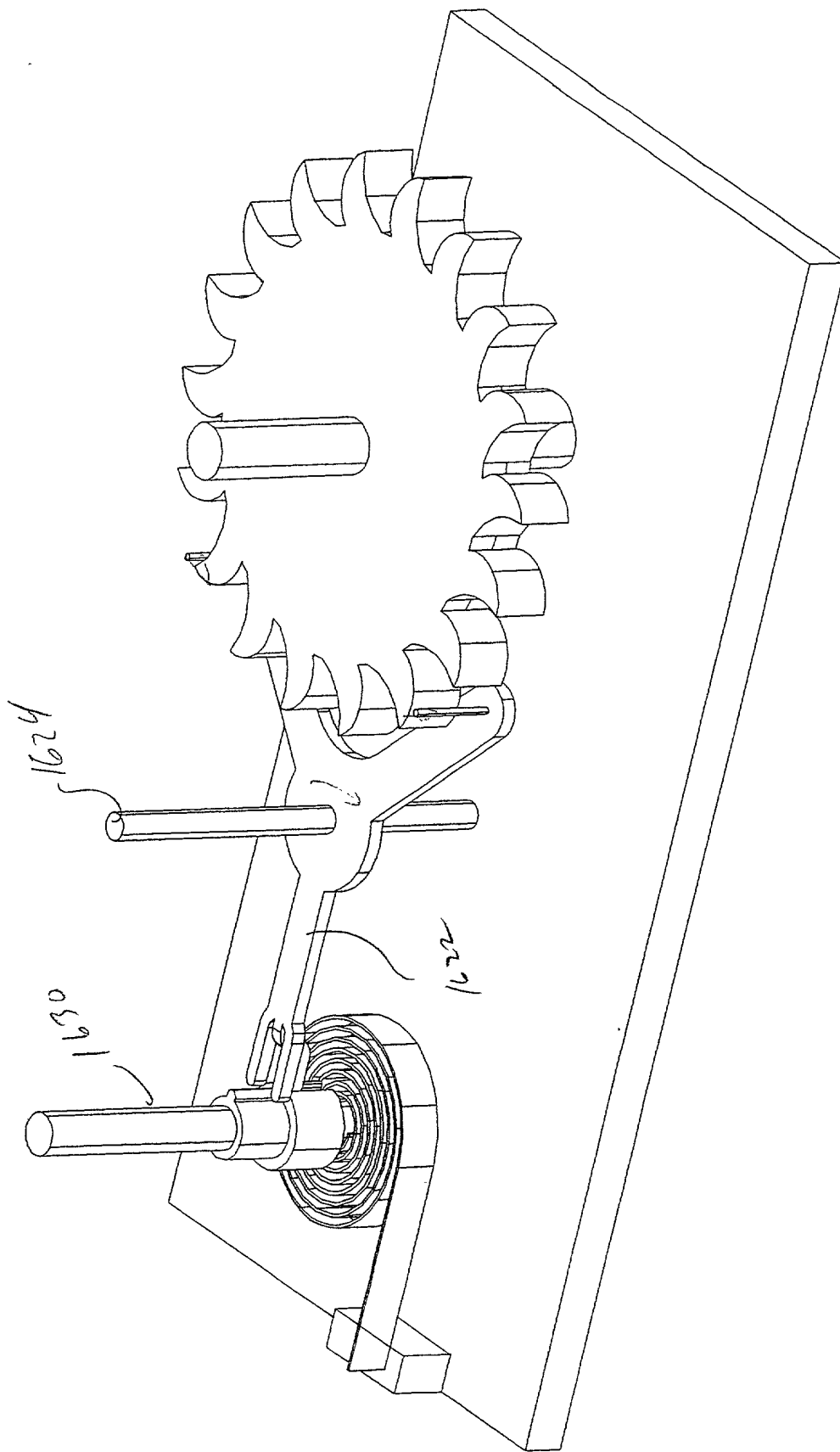


FIG 16



F1617

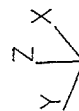
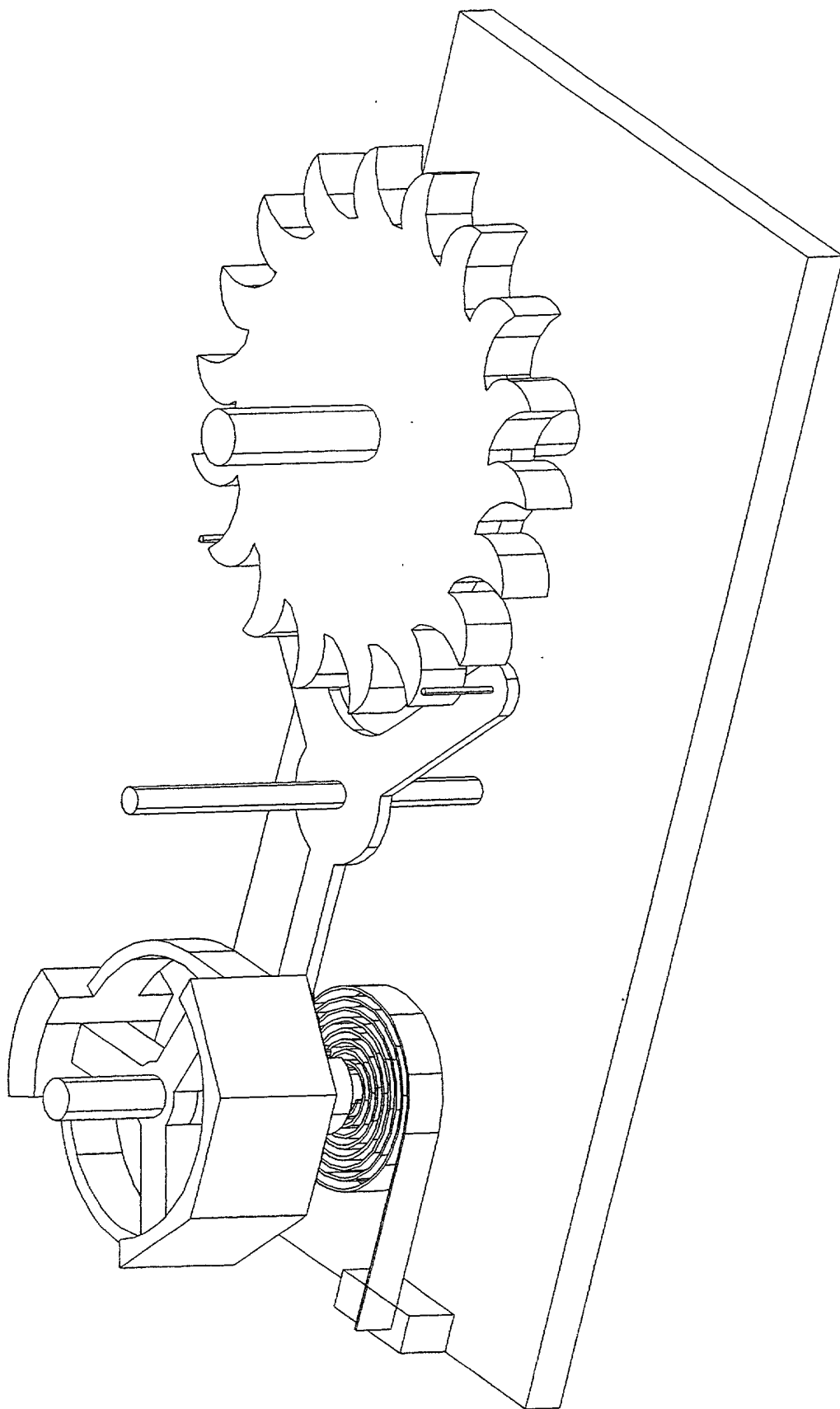


Fig 18



FOR REFERENCE

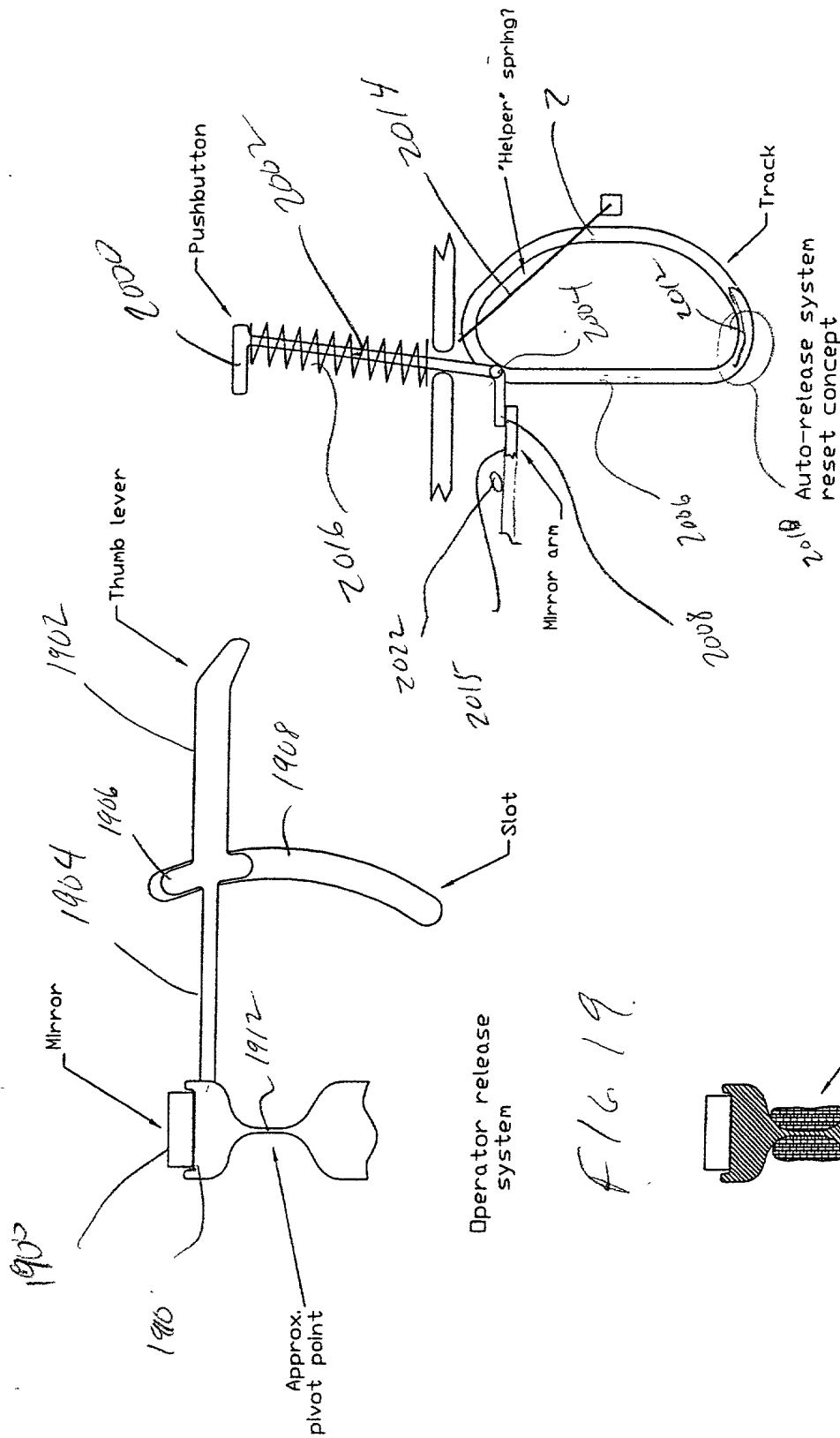
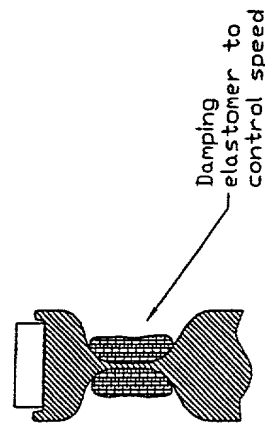


FIG. 19



Possible speed and acceleration control

FIG. 20

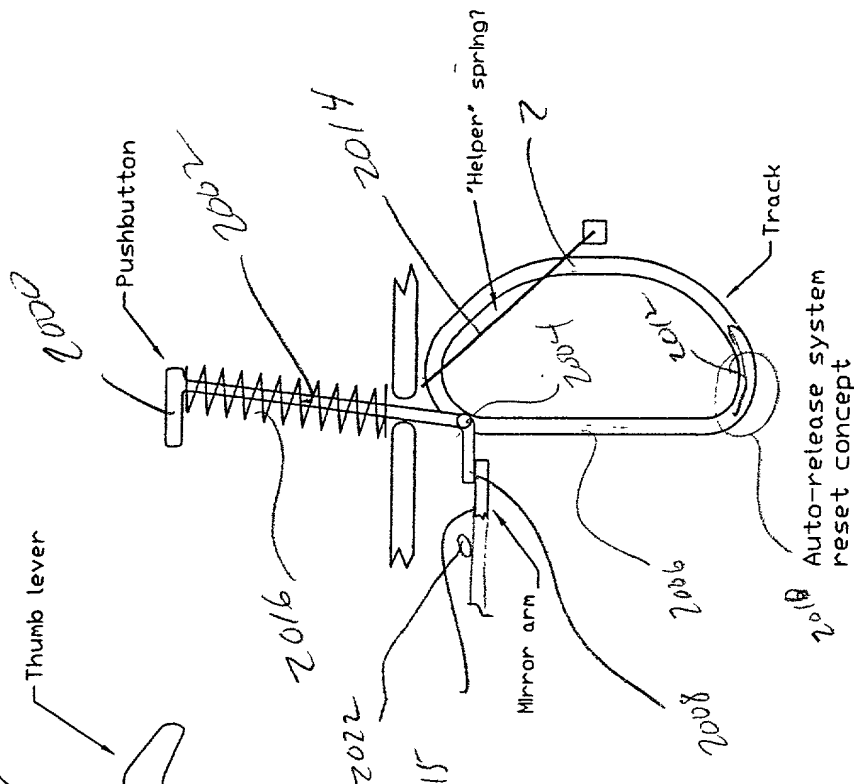


FIG. 21

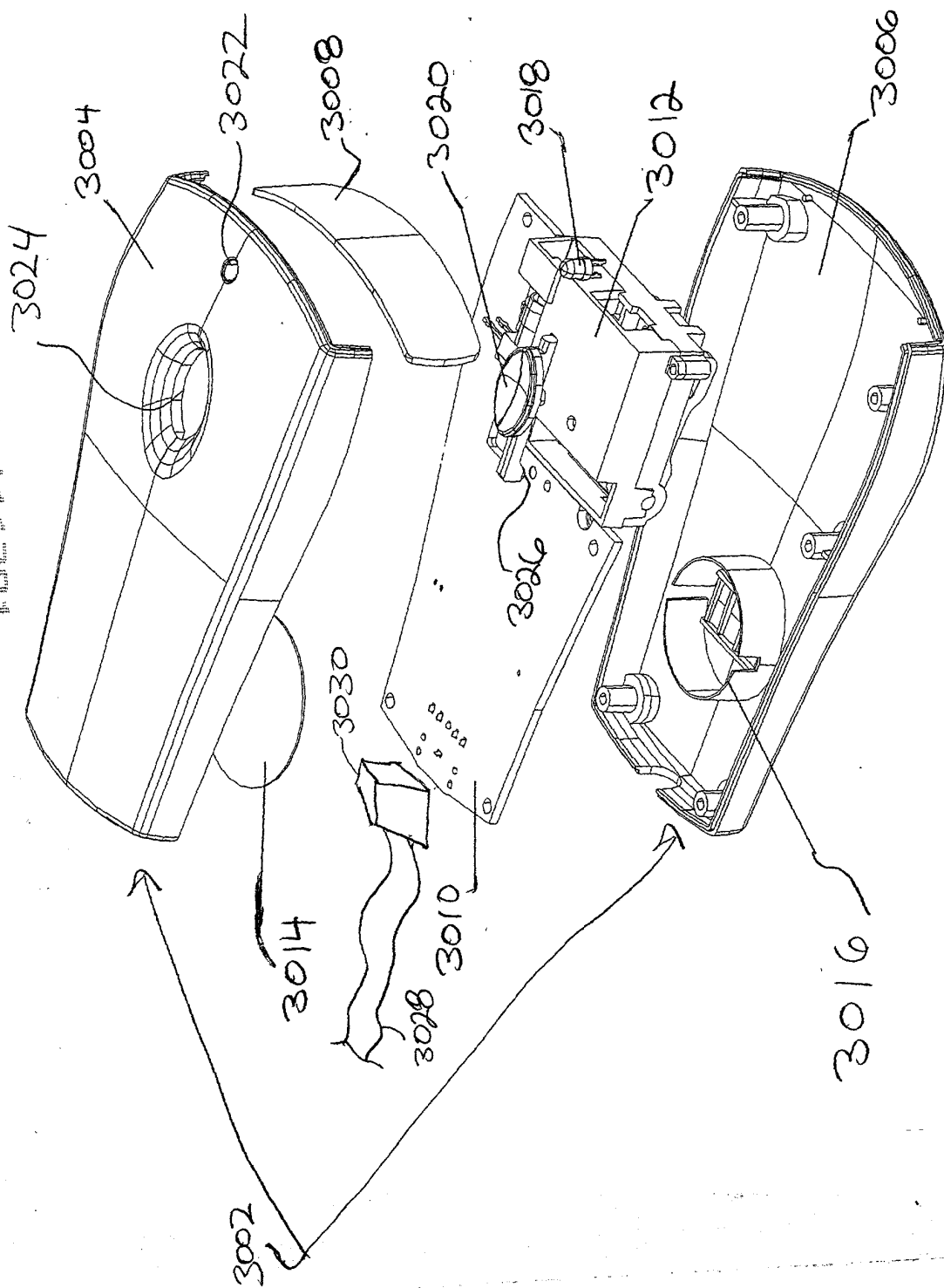


FIG. 21

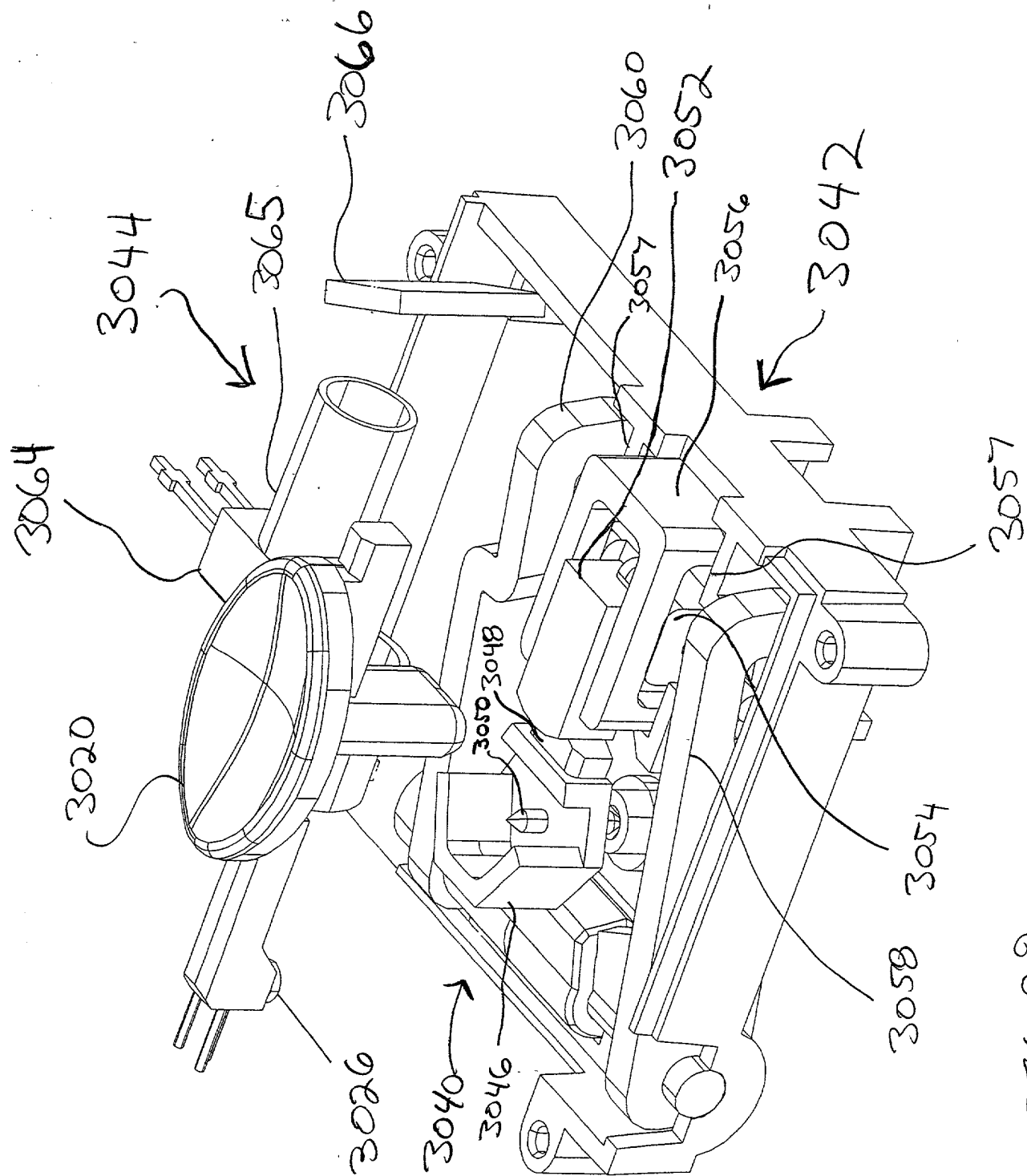


FIG. 22

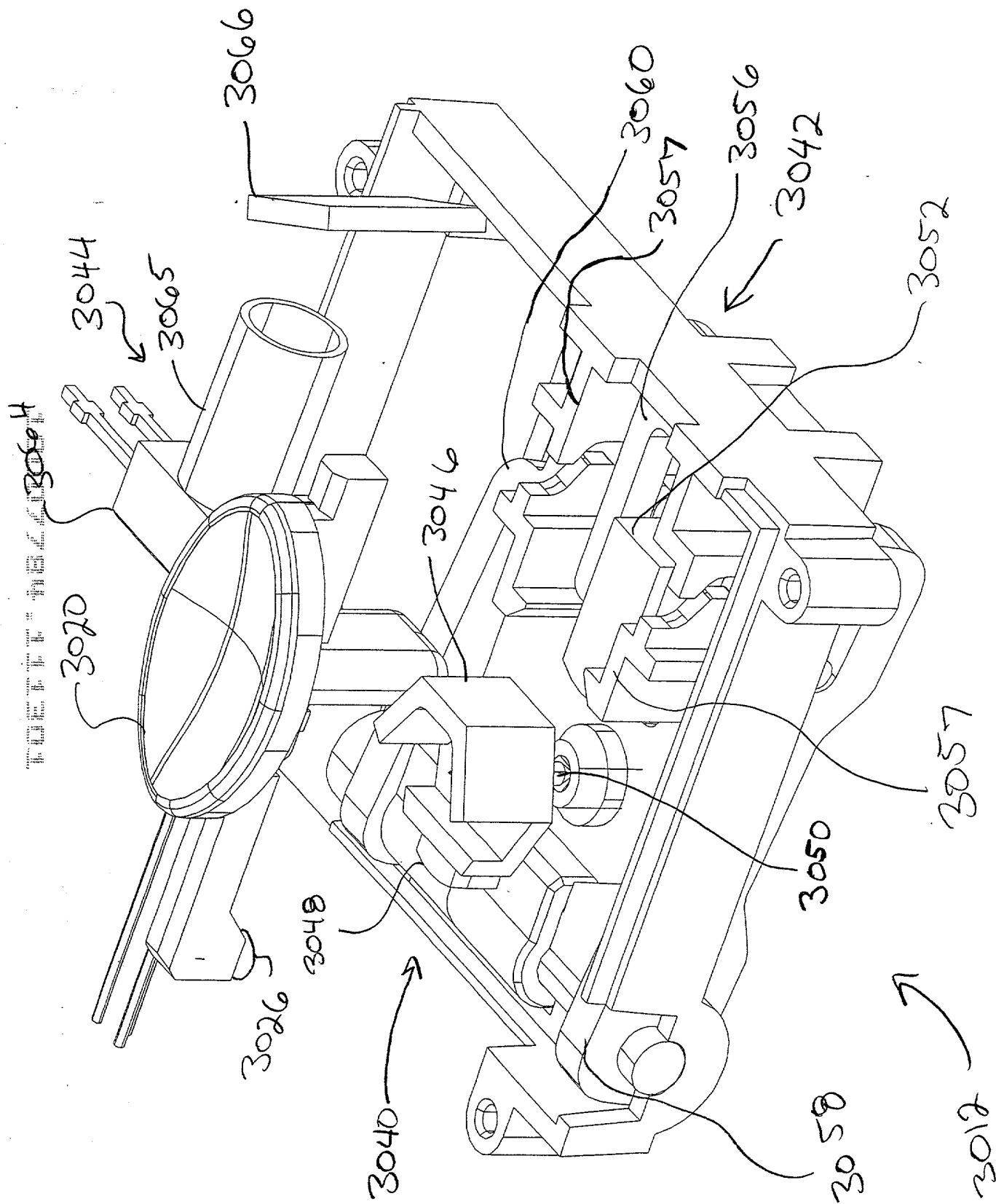


FIG. 23

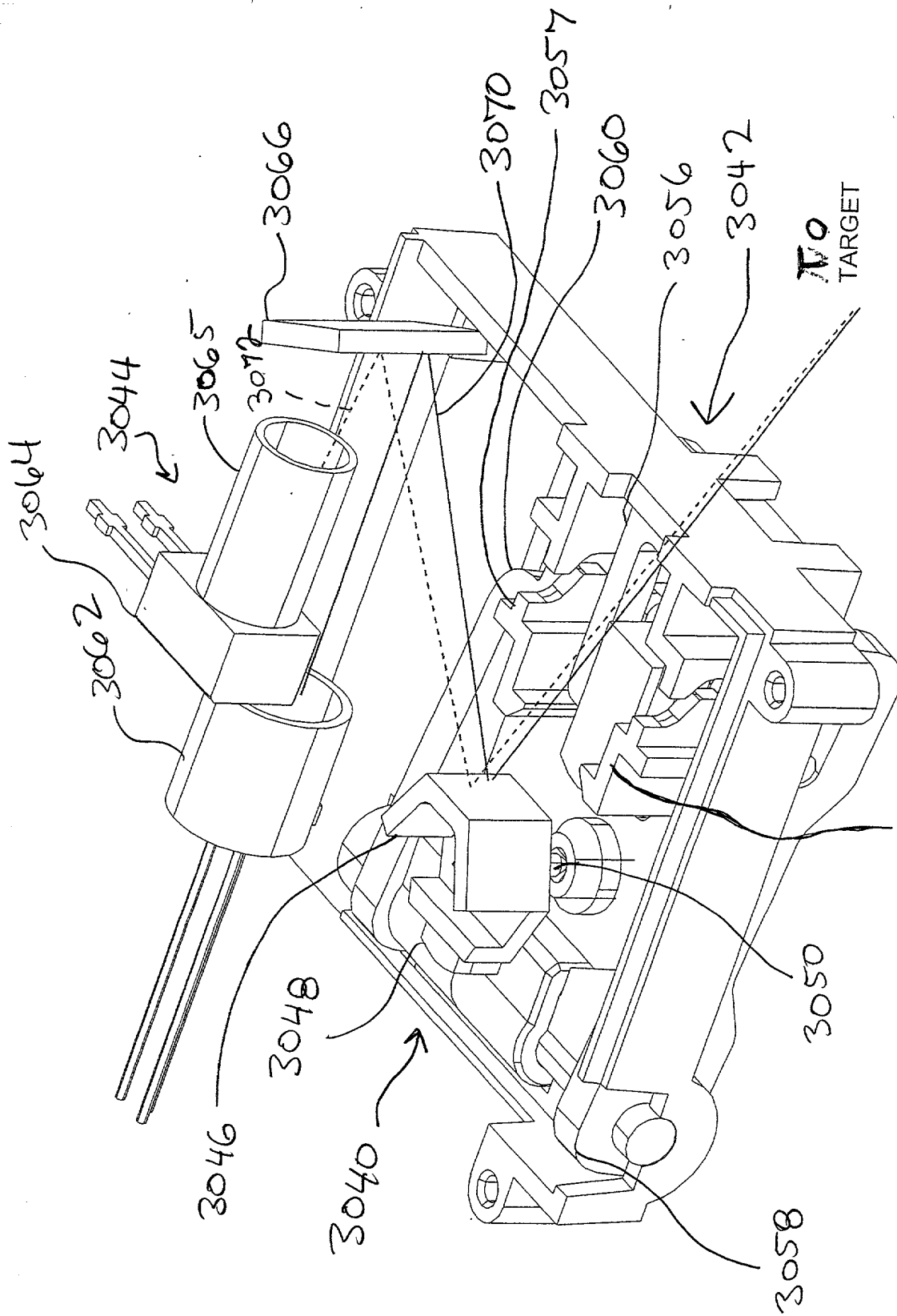


FIG. 24 3057

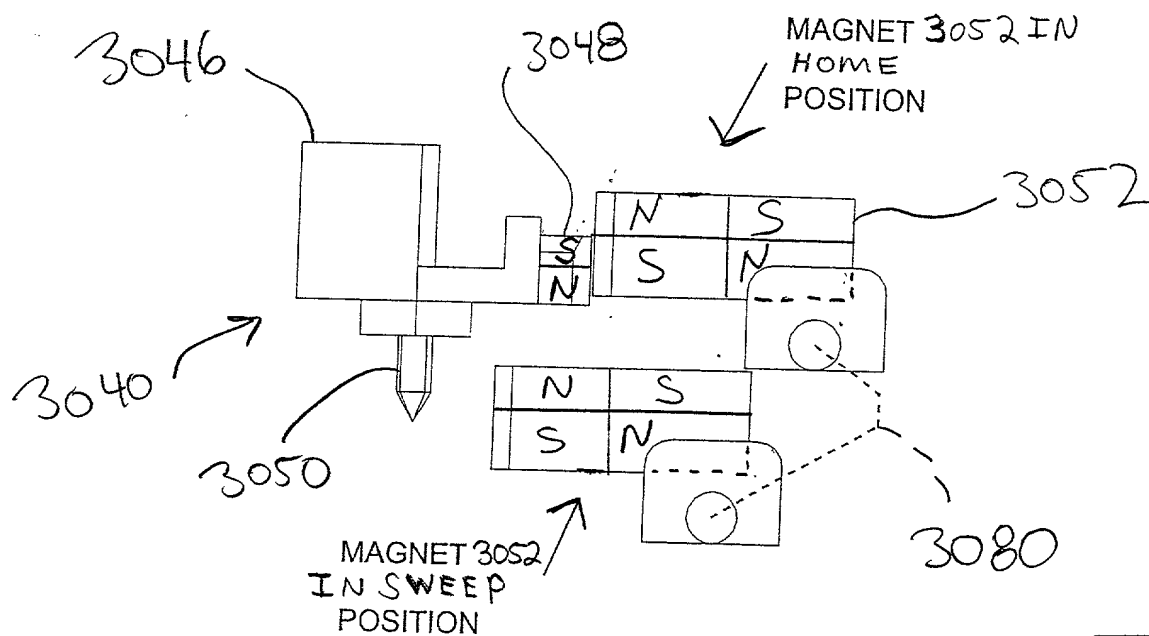


FIG. 25A

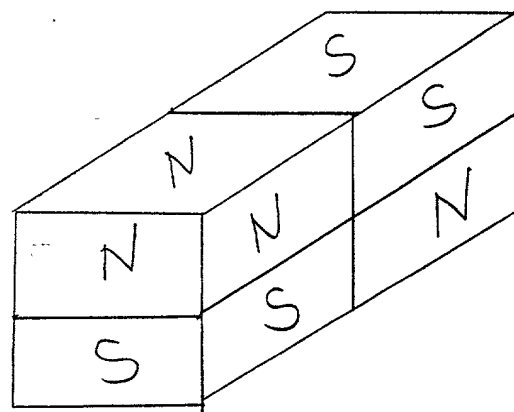


FIG. 25B

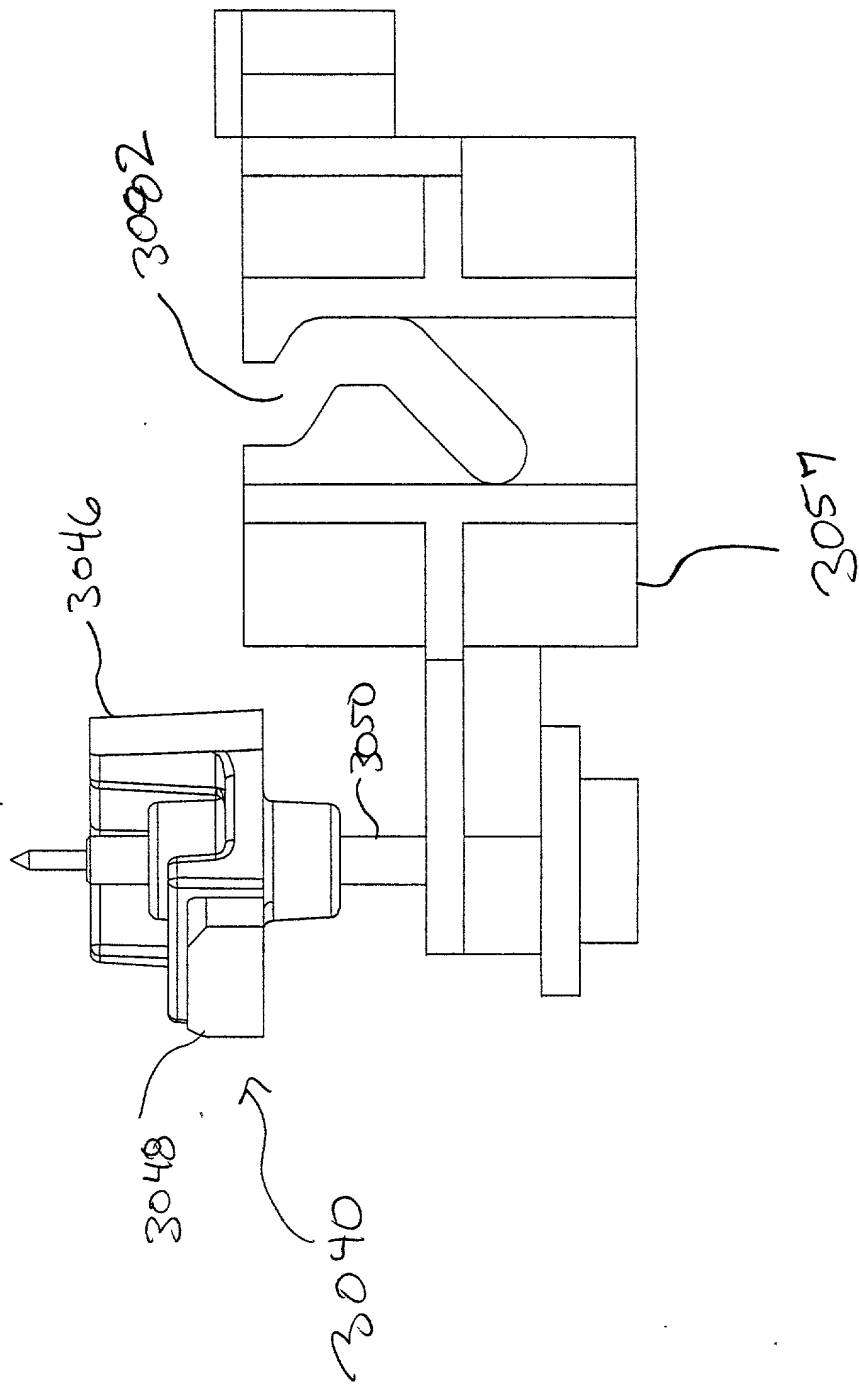


FIG. 26

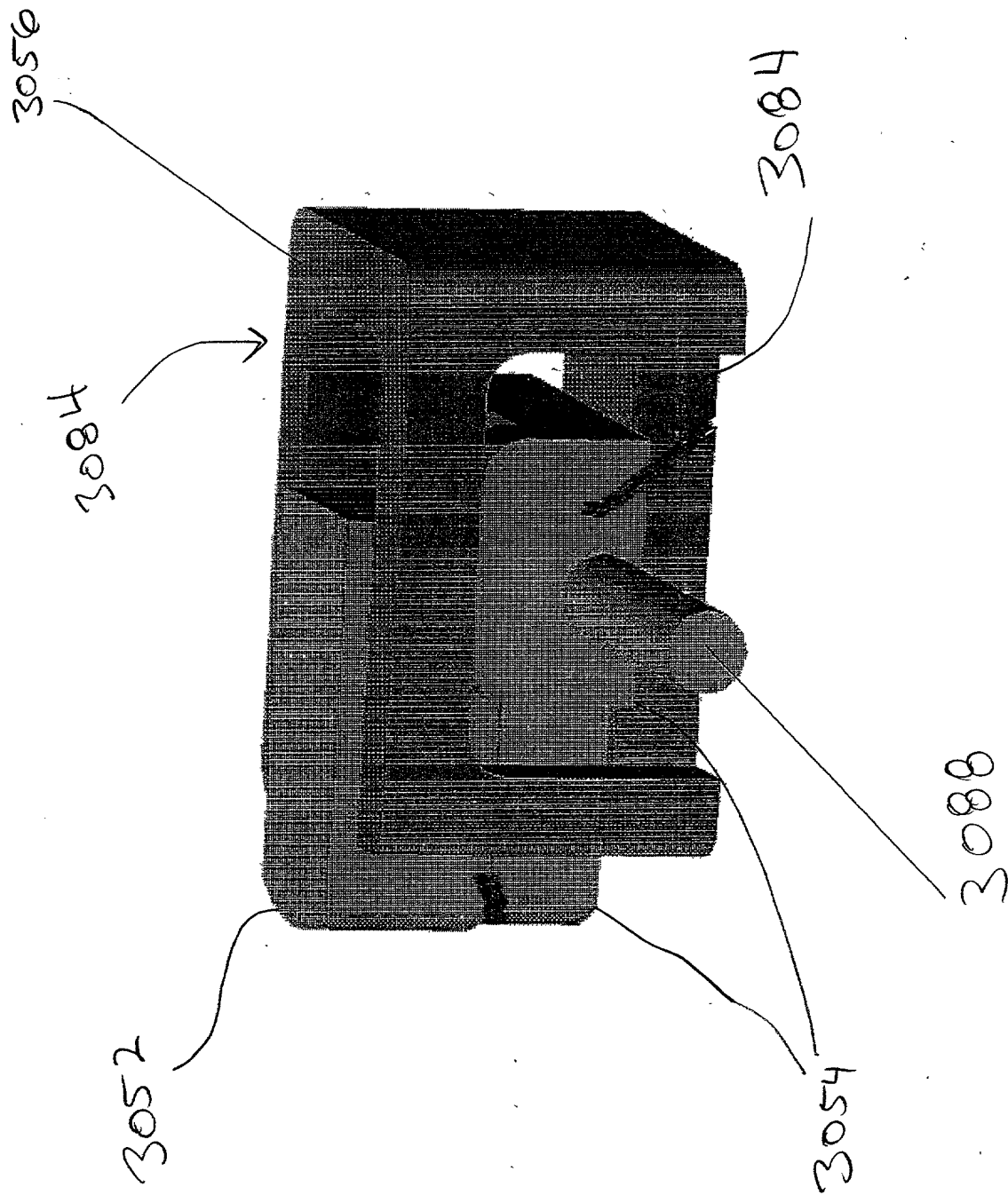


FIG. 27

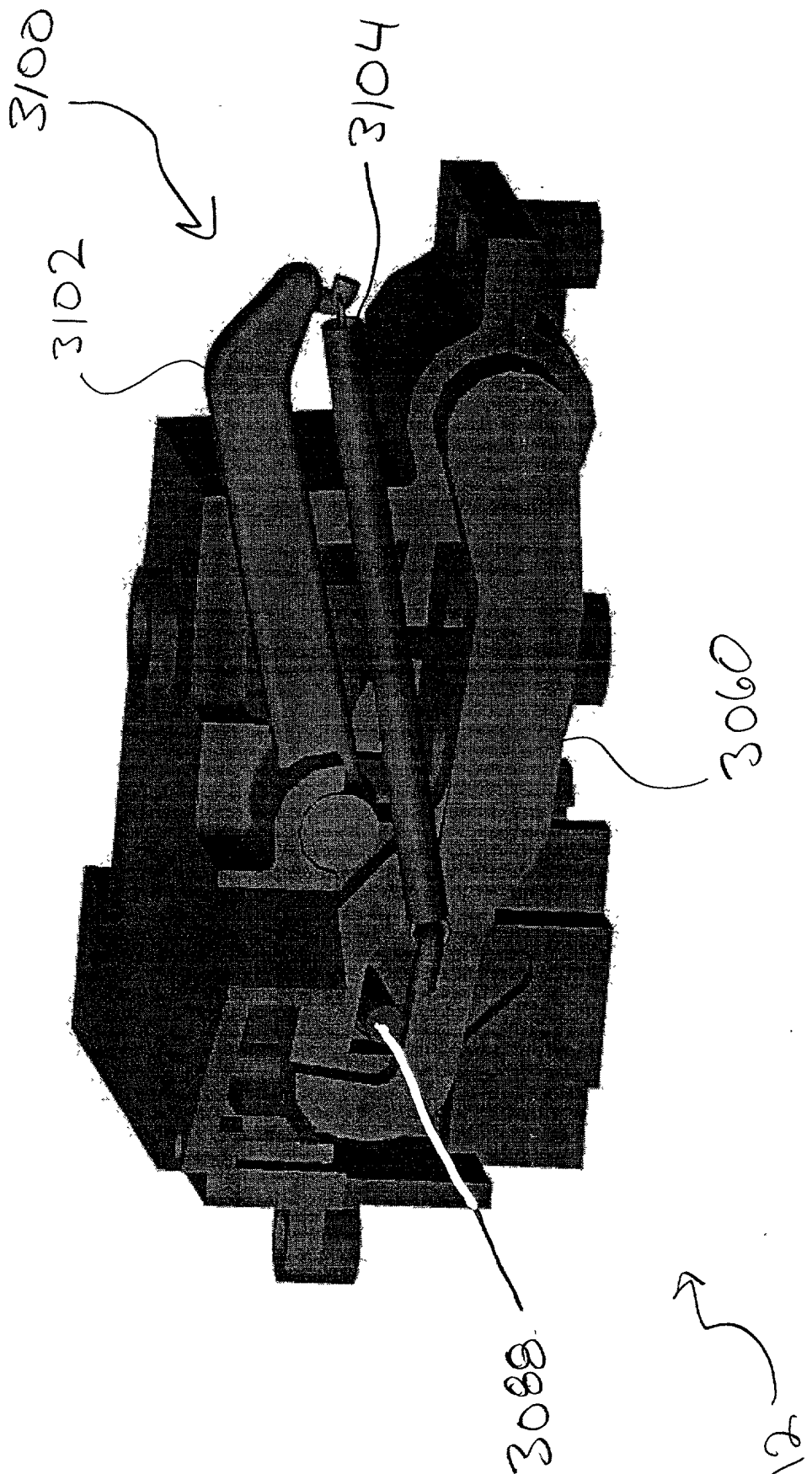


FIG. 28

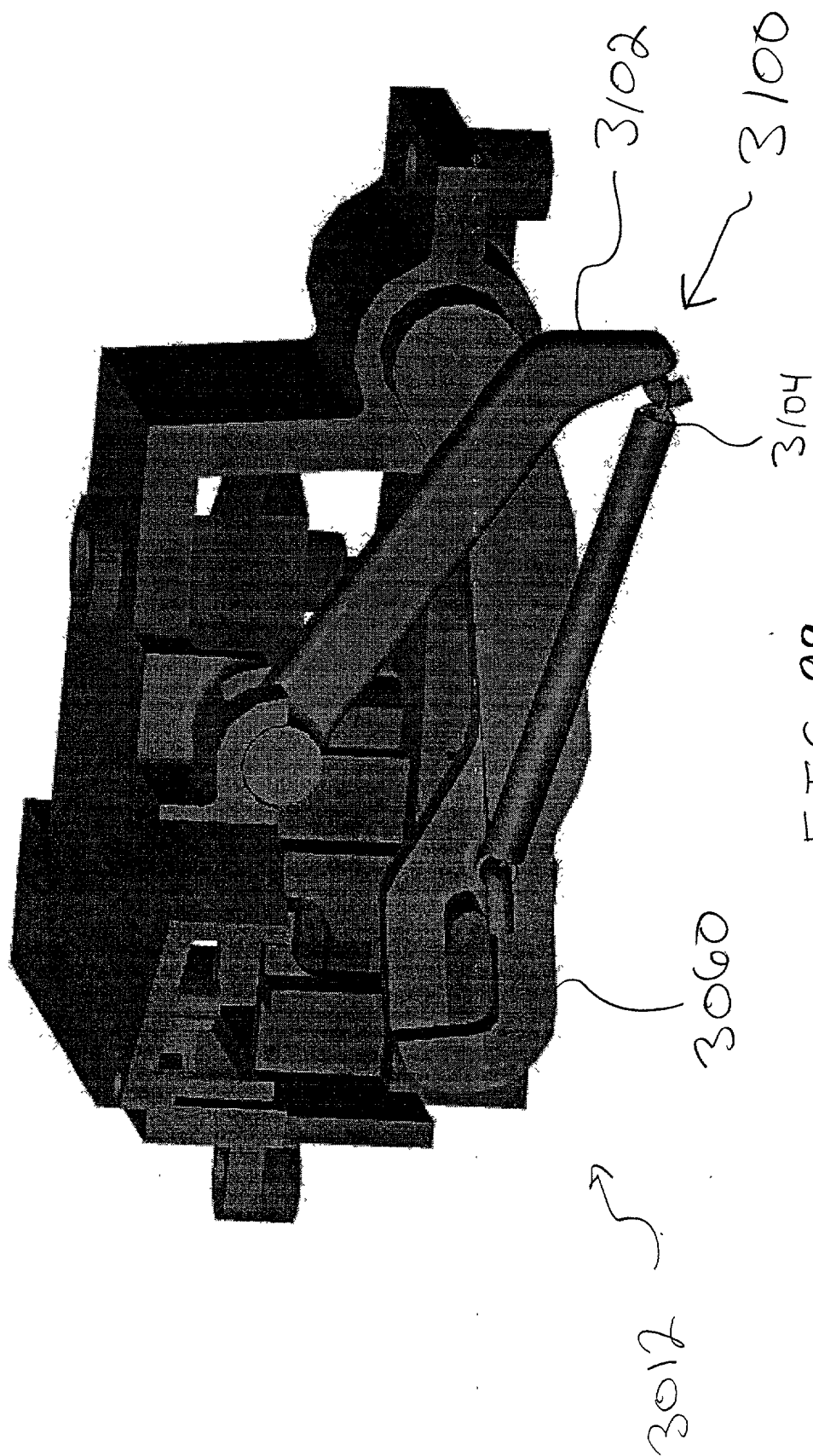


FIG. 29